

**Notice of Allowability**

Application No.

10/634,351

Examiner

Rip A. Lee

Applicant(s)

LIN ET AL.

Art Unit

1713

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to May 5, 2006.
2. ☒ The allowed claim(s) is/are 1-12, 16-20, 22-33, 35, 57-62, 65-70, 73-86, and 88.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Catherine L. Bell on July 20, 2006.

Claim 1, line 6            insert "highly" between "is" and "isotactic"

Claim 1, line 7            insert "having at least 60 % isotactic pentads" after "polypropylene"

Cancel claim 15

Claim 33, line 6            delete "and wherein"

Claim 33, line 7            delete the entire line "the polyolefin...copolymers,"

Claim 33, line 8            delete the entire line "propylene...impact"

Claim 33, line 9            delete "copolymers are reactor blends and,"

Claim 33, line 9            delete "an"

Claim 33, line 9            insert "highly" between "is" and "isotactic"

Claim 33, line 10          insert "having at least 60 % isotactic pentads" after "homopolymer"

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|------------------|--|
| Claim 86, line 4 | insert "highly" after the word "is"  |
| Claim 88, line 5 | insert "having at least 60 % isotactic pentads" after "polypropylene"                                |
| Claim 88, line 5 | insert "highly isotactic polypropylene having at least 60 % isotactic pentads" after "polyolefin is" |
| Claim 88, line 6 | delete the entire line "selected...impact"   |
| Claim 88, line 7 | delete the entire line "copolymers...are"  |
| Claim 88, line 8 | delete "reactor blends,"   |
| Claim 88, line 8 | insert "and" before the word "where"   |

*Allowable Subject Matter*

The following is an examiner's statement of reasons for allowance: Claims 1-12, 16-20, 22-33, 35, 57-62, 65-70, 73-86, and 88 are allowed.

Claim 1 is drawn to a plasticized polyolefin composition comprising from 60-99 wt % polyolefin and from 0.1-40 wt % of non-functionalized plasticizer wherein the non-functionalized plasticizer comprises C<sub>6</sub>-C<sub>200</sub> paraffins having a pour point of less than -30 °C and wherein elastomers are substantially absent from the composition and wherein the polyolefin is highly isotactic polypropylene having at least 60 % isotactic pentads. Claims 33 and 88 are variants of the parent claim. Claim 86 is drawn to a plasticized plasticized polyolefin composition comprising polyolefin and non-functionalized plasticizer wherein the plasticizer comprises C<sub>6</sub>-C<sub>200</sub> paraffins having a pour point of less than -40 °C, and claims 59 and 62 limit the plasticizer to having a pour point of less than -60 °C.

Claim 17 is drawn to a plasticized polyolefin composition comprising impact copolymer of specific composition and non-functionalized plasticizer comprising C<sub>6</sub>-C<sub>200</sub> paraffins having a pour point of less than -30 °C and having a weight average molecular weight of 100-25,000.

Claims 18, 65-70, and 73-82 are drawn to a plasticized polyolefin composition comprising from polyolefin and non-functionalized plasticizer wherein the non-functionalized plasticizer comprises C<sub>6</sub>-C<sub>200</sub> paraffins having a pour point of less than -30 °C and further comprising plastomer.

Claims 83-85 are drawn to a plasticized polyolefin composition comprising polyolefin and from 0.1-40 wt % of non-functionalized plasticizer wherein the non-functionalized plasticizer comprises C<sub>6</sub>-C<sub>200</sub> paraffins having a pour point of less than -30 °C and further comprising specific metallocene catalyzed copolymers.

The closest prior art is Iwasaki *et al.* (U.S. 5,240,966) discloses a granular colorant prepared by adsorption of Lucant HC-10 (non-functionalized plasticizer, C<sub>2</sub>/α-olefin oligomer, pour point = -53 °C) to the surface and pores of porous polypropylene resin grains. The reference does not teach use of highly isotactic polypropylene having at least 60 % isotactic pentads. Moreover, the composition of Iwasaki *et al.* is not plasticized as understood by those of ordinary skill in the art. In Iwasaki *et al.*, the plasticizer is merely contacted with the surface of polypropylene grains rather than melt blended into a uniform composition. In view of these facts, it is the examiner's position that the subject matter of the instant claims is patentable over the cited prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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July 24, 2006



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